

**Distribution Code Review Panel  
Meeting 73 – Thursday 6 December 2018**

**Paper by Code Administrator**

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Dear Jonathan,

**Engineering Recommendation P2 Revision**

Thank you for your letter dated 24 March 2017 relating to the progress of revision to Engineering Recommendation P2/6 – Security of Supply (ER P2/6).

On behalf of the Distribution Network Licencees and Energy Networks Association I would like to provide the Authority with an update on the current progress towards the revision of ER P2/6. This letter is in response to your questions and further to our letter sent to James Veaney on 22nd March (see appendix 3).

Firstly and foremost P2/6, as currently published, does not prevent early benefits being achieved from the solutions identified in your letter. All UK DNOs as part of their RIIO ED1 settlements included savings they expect from the use of smart interventions. Active Network Management, Constraint Managed Zones, Auto-change over schemes, Demand Side Response and Storage are all options that can, and indeed are, being utilised under the current P2/6 arrangements.

**Background**

The principle reason for the review is to ensure that as new interventions becomes more prevalent, the underlying impact on supply reliability remains transparent and quantifiable and that the resultant supply security remains acceptable to customers.

As you indicate ER P2/6 provides guidance for the DNOs on the level of security of supply for demand to be provided. As ER P2 had not been substantively reviewed for around 30 years and considering the many climate change drivers and significant technological developments, it was agreed by stakeholders that it was timely to review ER P2/6. As ER P2/6 is an annex 1 document to the Distribution Code a formal request to revise ER P2/6 was submitted to and approved by the Distribution Code Review Panel (DCRP).

Subsequently a DCRP stakeholder working group supported by a consortium consisting of DNV GL, NERA and Imperial College commenced work in January 2015 to undertake a review of ER P2/6. This work, referred to as Phase 1, delivered a series of work stream reports, all of which are published on the Distribution Code website, which culminated in a final report delivered by them in September 2016.

## Outputs of Phase 1

The Phase 1 analysis work was largely economic and recommended consideration of some potentially quite fundamental changes. It is of note that the time horizon and context for the analysis was not constrained by the structure and policy decisions put in place for ED1 nor by any assumptions about the level of supply security that would be acceptable to stakeholders in the future.

To test these proposals with stakeholders Phase 1 also included a series of stakeholder consultation events. Stakeholder feedback didn't align with or generally support the conclusions of the economic analysis and concerns were raised about the implications for the underlying reliability and availability of supply.

The primary objectives of Phase 1 were to assess the merit and direction of any revision of ER P2/6. It concluded there was a strong economic case to change P2/6 but that there were significant stakeholder issues remaining to be resolved. It is of note that Phase 1 contains three somewhat separate sets of recommendations for further consideration;

1. More explicit guidance on the inclusion of Distributed Energy Resources's (DER's) in the assessment of security of supply. This is already permitted by P2/6 and hence there are no policy barriers to the realisation of associated benefits. These benefits are to a large extent already included in DNO investment plans; in that smart solutions were included in load related expenditure plans. These benefits were a focus of the smart grid forum discussions.
2. A change in the minimum level of security of supply, specifically a reduction. Such a revision would offer some material future economic benefits but it is clear that stakeholders have significant concerns over such a move and the economic costs of any reduction in quality or security of electricity supplies. In addition, DNOs have expressed concern over the direction of travel suggested by the Phase 1 report and what this would mean for their customers and security of supply, and expected increased reliance on electricity arising from the low carbon transition.
3. Additional expenditure not in allowances. The analysis shows additional expenditure as being efficient in areas such as High Voltage network automation and mitigation of High Impact Low Probability events. The case for these is fairly robust, however there are a number of factors that merit further consideration including; timing of investments versus ED1 allowances, the assessment of 'efficient expenditure' and the price impacts for customers.

Phase 1 suggests that all three of the above are implemented simultaneously; in that it finds them all to be 'efficient'. However, it does not provide any analysis of the net effect of all three in combination. This is considered to be an essential step in engaging further with stakeholders. For example stakeholder concerns in respect of item 2 may be alleviated in part or whole by the effect of 3.

It is also of note that the phase 1 work did not consider the operational aspects of these changes. For example whilst in isolation the changes in 2 may be attractive, their cumulative effect during periods of severe network depletion such as storms warrants further analysis. Other operational considerations include the effects on network access for routine maintenance activities and for establishing new connections.

The DCRP accepted the Phase 1 report and endorsed the need to move to Phase 2 which is now ongoing.

### **Phase 2 work – Implementation Plan**

The scope of the potential changes suggested by Phase 1 were very significant but the report lacked detail on important implementation issues. As such Phase 1 could not be implemented by the DCRP without additional detailed work being undertaken.

DCRP met in December 2016 to both review Phase 1 and to determine how to structure and expediently progress to implementation. Mindful of the costs incurred in Phase 1, the DCRP asked a DNO sub group to devise an implementation framework known as Phase 2.

Two DNO workshops were held in February and a further two in March 2017, Ofgem were invited and attended the first of these workshops. The scope of the four workshops is detailed in Appendix 1. The sub group report is now being compiled and will be submitted to the DCRP P2 stakeholder working group (including Ofgem BEIS and others) for consideration and approval in Q2 2017.

It is expected that the DCRP stakeholder working group will test the workshop output against their terms of reference.

### **Next Steps**

It likely that the implementation work will be structured in two sub phases:

- Phase 2a - This will modify a number of the technical aspects of P2/6 and add clarity to the treatment of DER resources to bring benefits to customers. These changes have been the primary focus of the four workshops and in the main the changes are compatible with the overall RIIO-ED1 regulatory package.
- Phase 2b - This will address those items requiring more fundamental changes (recommendation sets 2 and 3 above) and with which there are potentially associated regulatory discussions needed.

Once this approach has been ratified by the DCRP P2 stakeholder working group a detailed project delivery plan will be produced including all milestones and deliverables. For information I have outlined in Appendix 2 a high level timeline for Phase 2:

We would expect to draft the Phase 2a changes into a set of formal recommended changes to ER P2/6 & supporting Engineering Technical Report 130 towards the end of 2017. In line with open governance procedures these will be submitted to the DCRP, most likely in December 2017 or March 2018 for approval to proceed to consultation, and then followed by a final report to the Authority. Once the 2a changes have been accepted by DCRP work will commence on phase 2b.

Finally, may I take this opportunity to assure you that with a review of this importance and technical complexity the Network companies and their senior executives are totally committed to leading, supporting and delivering any justified changes in a timely and considered manner.

ENA and members also believe that many of the issues will also form elements of the work undertaken as part of the TSO DSO project.

Yours sincerely



Chief Executive

cc

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Martin Queen, Senior Technical Adviser, Ofgem

Steve Cox, Chair of Distribution Code Review Panel,

CEOs of Electricity Distribution Licencees